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This listing of claims will replace all prior versions and listings of claims in the

Listing of Claims:

1. (canceled)

application.

- 2. (canceled)
- 3. (Currently Amended) The method of claim 2, further comprising

A method of reporting information from a vehicle to a vehicle data collection system, comprising:

- storing information which defines a geographic region in a vehicle, the geographic region comprising a predetermined array of cells, each cell having a cell position;
- associating a plurality of cell parameters with each cell, the cell parameters comprising a recording interval and a reporting interval;
- determining a vehicle position relative to the geographic region, wherein if the vehicle is within the geographic region, the vehicle position is correlated to a vehicle cell; recording vehicle data in accordance with the recording interval of the vehicle cell; and reporting the vehicle data to a vehicle data collection system in accordance with the reporting interval;
- repeating said steps of determining the vehicle position, recording the vehicle data and reporting the vehicle data for a plurality of cycles; and, updating the information which defines the geographic region.
- 4. (Currently Amended) The method of elaim 2 claim 3, further comprising updating at least one cell parameter.
- 5. (Currently Amended) The method of elaim-2 claim 3, wherein the vehicle data comprises at least one datum from the group consisting of a vehicle speed, a vehicle heading, the vehicle position, a vehicle elevation and an ambient temperature.
- 6. (Currently Amended) The method of elaim 2 claim 3, wherein the cell position comprises a latitudinal position and a longitudinal position.

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- 7. (original) The method of claim 6, wherein the cell position further comprises an elevational position.
- 8. (Currently Amended) The method of elaim 2 claim 3, wherein the cell parameters further comprise a recording priority.
- 9. (Currently Amended) The method of claim 8, wherein the recording priority of a cell is determined as a function of a roadway type located within the cell.
- 10. (Currently Amended) The method of claim 2 claim 3, wherein the geographic region comprises a plurality of geographic regions and the method may be selectively enabled or disabled for each geographic region.
- 11. (canceled)
- 12. (canceled)
- 13. (Currently Amended) The method of elaim 12 claim 15, wherein converting the vehicle position to a vehicle cell (X, Y) in relation to the array of cells is performed according to the following relationship:

$$X = (Lon_X - Lon_0)/C_{LON}$$
; and

$$Y = (Lat_v - Lat_0)/C_{LAT}$$
.

- 14. (original) The method of claim 13, wherein determining whether the vehicle cell is within the array of cells comprising the geographic region is performed by evaluating the values of X and Y, and wherein if $0 \le X \le N_{LON}$ and $0 \le Y \le N_{LAT}$, the vehicle is within the geographic region.
- 15. (Currently Amended) The method of claim 12, further comprising A method of reporting information from a vehicle to a vehicle data collection system, comprising:

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storing information comprising a geographic region in a vehicle, the geographic region having a latitudinal origin (Lat_0) and a longitudinal origin (Lon_0) and comprising a predetermined array of cells having a plurality of latitudinal elements (N_{LAT}) and a plurality of longitudinal elements (N_{LON}) , each cell having a cell position within the array, a latitudinal width (C_{LOT}) and a longitudinal width (C_{LON}) ;

- associating a plurality of cell parameters with each cell, the cell parameters comprising a recording priority $(T_{(X,Y)})$, reporting interval (t_x) and measurement interval (t_m) ;
- determining a vehicle position comprising a vehicle latitude (*Laty*) and vehicle longitude (*Lonx*);
- converting the vehicle position to a vehicle cell (X, Y) in relation to the array of cells;

 determining whether the vehicle cell is within the array of cells comprising the geographic region;
- if the vehicle is within the region, recording vehicle data in accordance with the recording priority and the recording interval of the vehicle cell; and
- reporting the vehicle data to a vehicle data collection system in accordance with the reporting interval;
- repeating determining the vehicle position, converting the vehicle position to a vehicle cell, determining whether the vehicle cell is within the array of cells, recording the vehicle data and reporting the vehicle data for a plurality of cycles; and, updating the information which defines the geographic region.
- 16. (Currently Amended) The method of elaim 12 claim 15, further comprising updating at least one cell parameter.
- 17. (Currently Amended) The method of elaim-12 claim 15, wherein the vehicle data comprises at least one datum from the group consisting of a vehicle speed, a vehicle heading, the vehicle position, a vehicle elevation and an ambient temperature.
- 18. (Currently Amended) The method of elaim 12 claim 15, wherein the cell position further comprises an elevational position.
- 19. (Currently Amended) The method of claim 12, GMC3109

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A method of reporting information from a vehicle to a vehicle data collection system, comprising:

- storing information comprising a geographic region in a vehicle, the geographic region having a latitudinal origin (Lat_0) and a longitudinal origin (Lon_0) and comprising a predetermined array of cells having a plurality of latitudinal elements (N_{LAT}) and a plurality of longitudinal elements (N_{LON}), each cell having a cell position within the array, a latitudinal width (C_{LOT}) and a longitudinal width (C_{LOT});
- associating a plurality of cell parameters with each cell, the cell parameters comprising a recording priority $(T_{(X,T)})$, reporting interval (t_r) and measurement interval (t_m) ; determining a vehicle position comprising a vehicle latitude (Lat_Y) and vehicle longitude (Lon_X) ;
- converting the vehicle position to a vehicle cell (X, Y) in relation to the array of cells; determining whether the vehicle cell is within the array of cells comprising the geographic region;
- if the vehicle is within the region, recording vehicle data in accordance with the recording priority and the recording interval of the vehicle cell; and
- reporting the vehicle data to a vehicle data collection system in accordance with the reporting interval;

repeating determining the vehicle position, converting the vehicle position to a vehicle cell, determining whether the vehicle cell is within the array of cells, recording the vehicle data and reporting the vehicle data for a plurality of cycles;

wherein the recording priority of a cell is determined as a function of a roadway type associated with the cell.

- 20. (Currently Amended) The method of claim 19, wherein the geographic region comprises a plurality of roadways located therein, each roadway having a roadway type identifier associated therewith, and wherein the recording priority of a cell is determined as a function of the roadway type identifier.
- 21. (Currently Amended) The method of elaim-12 claim 15, wherein the geographic region comprises a plurality of geographic reporting regions and the method may be selectively enabled or disabled for each of the geographic regions.

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- 22. (canceled)
- 23. (canceled)
- 24. (Currently Amended) The system of claim 23, further comprising

A system for communicating vehicle data between a vehicle and a vehicle data collection system:

- a vehicle that is adapted to record and report vehicle data as a function of a vehicle

 position, said vehicle having a vehicle data storage system to record vehicle data

 and a vehicle communication system to report the vehicle data that is adapted for

 wireless communication of the vehicle data;
- a vehicle data collection system that is adapted to receive and store vehicle data, said

 system adapted to receive wireless communication of the vehicle data from the

 vehicle;

wherein the vehicle is adapted to record and report vehicle data as a function of the vehicle position according to a method comprising:

- storing information which defines a geographic region in the vehicle, the geographic region comprising a predetermined array of cells, each cell having a cell position; associating a plurality of cell parameters with each cell, the cell parameters comprising a recording interval and a reporting interval;
- determining the vehicle position relative to the geographic region; wherein if the vehicle is within the geographic region, the vehicle position is correlated to a vehicle cell; recording the vehicle data in accordance with the recording interval of the vehicle cell; reporting the vehicle data to the vehicle data collection system in accordance with the reporting interval; and
- repeating the steps of determining the vehicle position, recording the vehicle data and reporting the vehicle data for a plurality of cycles; and, updating the information which defines the geographic region.
- 25. (original) The system of claim 24, wherein updating the information which defines the geographic region comprises communicating updated information concerning

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the geographic region from the vehicle data collection system to the vehicle and storing the updated information in the vehicle data storage system.

- 26. (Currently Amended) The system of elaim 23 claim 24, further comprising updating at least one cell parameter.
- 27. (original) The system of claim 26, wherein updating at least one cell parameter comprises communicating the updated information concerning the at least one cell parameter from the vehicle data collection system to the vehicle and storing the updated information in the vehicle data storage system.
- 28. (Currently Amended) The system of elaim 22 claim 24, wherein the vehicle data comprises at least one datum from the group consisting of a vehicle speed, a vehicle heading, the vehicle position, a vehicle elevation and an ambient temperature.